§63.11451

emission limit specified in §63.11451 no later than December 26, 2007.

- (2) If you start up your affected source after December 26, 2007, you must comply with the applicable emission limit specified in §63.11451 upon initial startup of your affected source.
- (c) If you own or operate a furnace that produces glass containing one or more glass manufacturing metal HAP as raw materials at an annual rate of less than 45 Mg/yr (50 tpy), and you increase glass production for that furnace to an annual rate of at least 45 Mg/yr (50 tpy), you must comply with the applicable emission limit specified in §63.11451 within 2 years of the date on which you increased the glass production rate for the furnace to at least 45 Mg/yr (50 tpy).
- (d) If you own or operate a furnace that produces glass at an annual rate of at least 45 Mg/yr (50 tpy) and is not charged with glass manufacturing metal HAP, and you begin production of a glass product that includes one or more glass manufacturing metal HAP as raw materials, and you produce at least 45 Mg/yr (50 tpy) of this glass product, you must comply with the applicable emission limit specified in §63.11451 within 2 years of the date on which you introduced production of the glass product that contains glass manufacturing metal HAP.
- (e) You must meet the notification requirements in §63.11456 according to the schedule in §63.11456 and in 40 CFR part 63, subpart A. Some of the notifications must be submitted before you are required to comply with emission limits specified in this subpart.

STANDARDS, COMPLIANCE, AND MONITORING REQUIREMENTS

§ 63.11451 What are the standards for new and existing sources?

If you are an owner or operator of an affected furnace, as defined in §63.11449(a), you must meet the applicable emission limit specified in Table 1 to this subpart.

§ 63.11452 What are the performance test requirements for new and existing sources?

(a) If you own or operate an affected furnace that is subject to an emission limit specified in Table 1 to this sub-

part, you must conduct a performance test according to paragraphs (a)(1) through (3) and paragraph (b) of this section.

- (1) For each affected furnace, you must conduct a performance test within 180 days after your compliance date and report the results in your Notification of Compliance Status, except as specified in paragraph (a)(2) of this section.
- (2) You are not required to conduct a performance test on the affected furnace if you satisfy the conditions described in paragraphs (a)(2)(i) through (iii) of this section.
- (i) You conducted a performance test on the affected furnace within the past 5 years of the compliance date using the same test methods and procedures specified in paragraph (b) of this sec-
- (ii) The performance test demonstrated that the affected furnace met the applicable emission limit specified in Table 1 to this subpart.
- (iii) Either no process changes have been made since the test, or you can demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance with the applicable emission limit.
- (3) If you operate multiple identical furnaces, as defined in §63.11459, that are affected furnaces, you are required to test only one of the identical furnaces if you meet the conditions specified in paragraphs (a)(3)(i) through (iii) of this section.
- (i) You must conduct the performance test while the furnace is producing glass that has the greatest potential to emit the glass manufacturing metal HAP from among the glass formulations that are used in any of the identical furnaces.
- (ii) You certify in your Notification of Compliance Status that the identical furnaces meet the definition of identical furnaces specified in §63.11459.
- (iii) You provide in your Notification of Compliance Status documentation that demonstrates why the tested glass formulation has the greatest potential to emit the glass manufacturing metal HAP.

Environmental Protection Agency

- (b) You must conduct each performance test according to the requirements in §63.7 and paragraphs (b)(1) through (12) and either paragraph (b)(13) or (b)(14) of this section.
- (1) Install and validate all monitoring equipment required by this subpart before conducting the performance test.
- (2) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §63.7(e)(1).
- (3) Conduct the test while the source is operating at the maximum production rate.
- (4) Conduct at least three separate test runs with a minimum duration of 1 hour for each test run, as specified in §63.7(e)(3).
 - (5) Record the test date.
- (6) Identify the emission source tested.
- (7) Collect and record the emission test data listed in this section for each run of the performance test.
- (8) Locate all sampling sites at the outlet of the furnace control device or at the furnace stack prior to any releases to the atmosphere.
- (9) Select the locations of sampling ports and the number of traverse points using Method 1 or 1A of 40 CFR part 60, appendix A-1.
- (10) Measure the gas velocity and volumetric flow rate using Method 2, 2A, 2C, 2F, or 2G of 40 CFR part 60, appendices A-1 and A-2, during each test run.
- (11) Conduct gas molecular weight analysis using Methods 3, 3A, or 3B of 40 CFR part 60, appendix A-2, during each test run. You may use ANSI/ASME PTC 19.10-1981, Flue and Exhaust Gas Analyses (incorporated by reference—see §63.14) as an alternative to EPA Method 3B.
- (12) Measure gas moisture content using Method 4 of 40 CFR part 60, appendix A-3, during each test run.
- (13) To meet the particulate matter (PM) emission limit specified in Table 1 to this subpart, you must conduct the procedures specified in paragraphs (b)(13)(i) through (v) of this section.
- (i) Measure the PM mass emission rate at the outlet of the control device or at the stack using Method 5 or 17 of 40 CFR part 60, appendices A-3 or A-6, for each test run.

- (ii) Calculate the PM mass emission rate in the exhaust stream for each test run.
- (iii) Measure and record the glass production rate (kilograms (tons) per hour of product) for each test run.
- (iv) Calculate the production-based PM mass emission rate (g/kg (lb/ton)) for each test run using Equation 1 of this section.

$$MP = \frac{ER}{P}$$
 (Equation 1)

Where:

- MP = Production-based PM mass emission rate, grams of PM per kilogram (pounds of PM per ton) of glass produced.
- ER = PM mass emission rate measured using Methods 5 or 17 during each performance test run, grams (pounds) per hour.
- P = Average glass production rate for the performance test, kilograms (tons) of glass produced per hour.
- (v) Calculate the 3-hour block average production-based PM mass emission rate as the average of the production-based PM mass emission rates for each test run.
- (14) To meet the metal HAP emission limit specified in Table 1 to this subpart, you must conduct the procedures specified in paragraphs (b)(14)(i) through (v) of this section.
- (i) Measure the metal HAP mass emission rate at the outlet of the control device or at the stack using Method 29 of 40 CFR part 60, appendix A-8, for each test run.
- (ii) Calculate the metal HAP mass emission rate in the exhaust stream for the glass manufacturing metal HAP that are added as raw materials to the glass manufacturing formulation for each test run.
- (iii) Measure and record the glass production rate (kilograms (tons) per hour of product) for each test run.
- (iv) Calculate the production-based metal HAP mass emission rate (g/kg (lb/ton)) for each test run using Equation 2 of this section.

$$MPM = \frac{ERM}{P}$$
 (Equation 2)

Where:

MPM = Production-based metal HAP mass emission rate, grams of metal HAP per

§ 63.11453

kilogram (pounds of metal HAP per ton) of glass produced.

ERM = Sum of the metal HAP mass emission rates for the glass manufacturing metal HAP that are added as raw materials to the glass manufacturing formulation and are measured using Method 29 during each performance test run, grams (pounds) per hour.

- P = Average glass production rate for the performance test, kilograms (tons) of glass produced per hour.
- (v) Calculate the 3-hour block average production-based metal HAP mass emission rate as the average of the production-based metal HAP mass emission rates for each test run.

§ 63.11453 What are the initial compliance demonstration requirements for new and existing sources?

- (a) If you own or operate an affected source, you must submit a Notification of Compliance Status in accordance with §§ 63.9(h) and 63.11456(b).
- (b) For each existing affected furnace that is subject to the emission limits specified in Table 1 to this subpart, you must demonstrate initial compliance according to the requirements in paragraphs (b)(1) through (4) of this section.
- (1) For each fabric filter that is used to meet the emission limit specified in Table 1 to this subpart, you must visually inspect the system ductwork and fabric filter unit for leaks. You must also inspect the inside of each fabric filter for structural integrity and fabric filter condition. You must record the results of the inspection and any maintenance action as required in §63.11457(a)(6).
- (2) For each electrostatic precipitator (ESP) that is used to meet the emission limit specified in Table 1 to this subpart, you must verify the proper functioning of the electronic controls for corona power and rapper operation, that the corona wires are energized, and that adequate air pressure is present on the rapper manifold. You must also visually inspect the system ductwork and ESP housing unit and hopper for leaks and inspect the interior of the ESP to determine the condition and integrity of corona wires, collection plates, hopper, and air diffuser plates. You must record the results of the inspection and any maintenance action as required in §63.11457(a)(6).

- (3) You must conduct each inspection specified in paragraphs (b)(1) and (2) of this section no later than 60 days after your applicable compliance date specified in §63.11450, except as specified in paragraphs (b)(3)(i) and (ii) of this section.
- (i) An initial inspection of the internal components of a fabric filter is not required if an inspection has been performed within the past 12 months.
- (ii) An initial inspection of the internal components of an ESP is not required if an inspection has been performed within the past 24 months.
- (4) You must satisfy the applicable requirements for performance tests specified in §63.11452.
- (c) For each new affected furnace that is subject to the emission limit specified in Table 1 to this subpart and is controlled with a fabric filter, you must install, operate, and maintain a bag leak detection system according to paragraphs (c)(1) through (3) of this section.
- (1) Each bag leak detection system must meet the specifications and requirements in paragraphs (c)(1)(i) through (viii) of this section.
- (i) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 1 milligram per dry standard cubic meter (0.00044 grains per actual cubic foot) or less.
- (ii) The bag leak detection system sensor must provide output of relative PM loadings. The owner or operator shall continuously record the output from the bag leak detection system using electronic or other means (e.g., using a strip chart recorder or a data logger).
- (iii) The bag leak detection system must be equipped with an alarm system that will sound when the system detects an increase in relative particulate loading over the alarm set point established according to paragraph (c)(1)(iv) of this section, and the alarm must be located such that it can be heard by the appropriate plant personnel.
- (iv) In the initial adjustment of the bag leak detection system, you must establish, at a minimum, the baseline output by adjusting the sensitivity (range) and the averaging period of the